



#314 Liquid Nitrogen

This course addresses the hazards of cryogenic liquid nitrogen usage and handling, and the techniques for controlling these hazards. The bases for this course include OSHA and NASA documentation and NASA applications and mishaps. The content includes: fundamentals of liquid nitrogen (physical and chemical characteristics); hazards of liquid nitrogen; safeguards for usage and handling of liquid nitrogen; safety features for storage, transfer, and transportation of liquid nitrogen; and emergency procedures and disposal of liquid nitrogen. This course will primarily be presented via the NASA Videoteleconferencing system and the instructor-led version of this class will only be available if combined with another course by the same instructor, if there are enough students to merit multiple presentations, or to meet special, urgent needs. Check with the NSTC management staff for determination.

Target Audience:

- Safety, Reliability, Quality, and Maintainability Professionals
- Supervisors managing the usage and handling of liquid nitrogen, science and engineering personnel designing, planning and operating battery powered systems
- Technical personnel performing maintenance and operations for battery systems.

Dates: February 9, 2006 8:00 – 12:00

Location: MSFC Building 4200, Room G13E

About the Instructor: Jim Duncan, CSP, PE, employed with the Technology Group of Jacobs Sverdrup in Tullahoma, Tennessee, holds a B.S. in Mechanical Engineering from Tennessee Technological University and completed numerous graduate courses in aerospace engineering at the University of Tennessee Space Institute. He has over 23 years of experience in various facets of engineering and aerospace facility operations at multiple locations including the DOE Savannah River Plant, the Arnold Engineering Development Center, and the Goddard Space Flight Center. After several years of experience in the system safety field supporting various aerospace and automotive test facility projects. he is currently the Health & Safety Manager for the Technology Group with responsibility for safety program leadership at multiple office, operations, and construction locations. In addition to these responsibilities, he is also teaching the cryogenics safety course for the NSTC.